

INDUS JOURNAL OF BIOSCIENCE RESEARCH

https://induspublishers.com/IJBR ISSN: 2960-2793/ 2960-2807







Assessing the Impact of Autonomy on Job Satisfaction among Critical Care Nurses

Amna Afifa¹, Sadaqat Aftab¹, Madiha Mukhtar¹, Sheharyar Ahmed¹

¹Lahore School of Nursing, The University of Lahore, Lahore, Punjab, Pakistan.

ARTICLE INFO

Keywords

Job autonomy, Job Satisfaction, Critical Care Nurses.

Corresponding Author: Amna Afifa, BSN Student, Lahore School of Nursing, The University of Lahore, Lahore, Punjab, Pakistan.

Email: amna.afifa203kwl@gmail.com

Declaration

Author's Contributions: All authors equally contributed to the study and approved the final manuscript.

Conflict of Interest: No conflict of interest. **Funding:** No funding received by the authors.

Article History

Received: 18-10-2024 Revised: 23-12-2024 Accepted: 10-01-2025

ABSTRACT

Background: Job autonomy and job satisfaction are critical factors influencing the wellbeing and performance of nurses in critical care settings. Autonomy empowers nurses to make independent decisions, while job satisfaction enhances their motivation and commitment. This study aimed to assess the relationship between job autonomy and job satisfaction among critical care nurses at the University of Lahore Teaching Hospital. Methods: A quantitative, descriptive cross-sectional design was adopted. Data were collected from 36 critical care nurses using a structured questionnaire comprising job autonomy and job satisfaction scales. Demographic characteristics were analyzed using descriptive statistics. Results: The majority of participants were female (77.8%) and aged between 21-25 years (88.9%), with 2-4 years of experience (47.2%). Most respondents reported moderate levels of autonomy (55.6%) and job satisfaction (61.1%), with smaller proportions reporting low or good levels. Conclusion: This study highlights the importance of autonomy as a key predicator of job satisfaction among critical care nurses. Empowering nurses through participatory decision-making, resource availability, and supportive leadership can enhance both autonomy and satisfaction. Interventions targeting these areas could improve nurse retention and patient outcomes. Future research should explore these relationships in larger and more diverse populations to further validate these findings.

INTRODUCTION

Background

Special focus has been accorded to job satisfaction critical care nurses because of its potential in improving the quality service delivery and decrease staff turnover. Surgical comprehensive nursing, in particular, requires high levels of decisions concerning the treatment plan and communicating with severely ill patients, as well as the ability to function independently, as critical care unreasonable demands. Nursing profession autonomy is the ability of the nurse to practice independently with decision-making and actions releases along the clinical practice, without prior authorization and intervention from other authority this has been confirmation of minimize burnout and increased job satisfaction .(Heijkants et al., 2024)

The research shows that independence enhances the organization's working environment for critical care nurses and makes them happier with the jobs. For instance, a research on autonomy in the context of healthcare work setting identified that autonomous

working improves perceived amount of control and professional confidence among the nurses which, in turn boosts job satisfaction of the working professionals (De Lange et al., 2024). This is especially important in acute care areas, because of the numerous challenges and stressful conditions that are present in nursing practice and which require independent decision making. Remarkably, work Schedule control brings convenience to the nurses, which way they have more ability to tend to the needs of their patients, and the quality of work was increase, which was in turn improve the overall quality of care that the patients receive from the nurses (Muhammad Saeed et al., 2024).

Moreover, critical care environments include features that are quite distinct and wholly call for nurse autonomy. The concept of discretion therefore goes further than individual job satisfaction effects; all the way to team and healthcare continued here. Nurses who practices nursing with autonomy, especially in risky departments like Intensive Care Units (ICUs), studies show that they enjoy their work and thus patients get the best they deserve (Espinoza et al., 2024). Research also shows that independent efforts carried out by nurses reduce emotional fatigue levels and ultimately, increase retention (Heijkants et al., 2024).

Based on these findings, many works stress the necessity to create conditions that promote autonomous practice areas of nursing profession and to solve the issues connected with staffing and job satisfaction (Cappellini et al., 2024). Also, burnout, a problem critical care nurses experienced frequently, could be resolved by job autonomy, increasing engagement, and decreasing stress levels, which enhance the workplace culture (White, 2023). Decision-making competence is crucial in the growth and satisfaction of nurses and ultimately by maintaining nurses' commitment to the health system (Jarden et al., 2024).

Given that healthcare facilities in various countries are experiencing operating pressures especially in the ICU, there is an increased necessity for increasing nurses' job satisfaction through autonomy. This has led to different developments for instance, the community based programmes which target to empower nurses and increase their decision making responsibilities (Garratt et al., 2024). Altogether it raises significance of autonomy for improving crucial care nursing employee satisfaction and recommending for better programmes autonomy supportive nursing employee satisfaction and programme for health care.

Problem Statement

Although previous studies revealed that autonomy has a direct positive correlation with job satisfaction, critical care nurses experience restricted levels of professional autonomy which subsequently result in job dissatisfaction, burnout, and moreover, higher turnover rates. Consequently, this study aims at filling this gap by exploring the extent to which autonomy affects job satisfaction of critical care nurses and how the works environments affect these aspects.

Significance of the Study

Having insight into the extent of the relationship between autonomy and job satisfaction among CCNs is important for both health care managers and policy makers. Autonomy can increase the value of job satisfaction to enhance the retention rates, better patient services, and stronger employees. As the scarcity of skilled nurses particularly those who specialize in areas such as care of the acutely ill patients increases, encouraging autonomy at the workplace is an effective method of protecting the physical and psychological welfare of the the nursing employees as well as improving occupational productivity. Besides, this study was help develop more empirical-based ideas on how the healthcare institutions should work towards developing

a conducive workplace environment that can reduce stress and burnout among critical care nurses (Gillani et al., 2018; Lee et al., 2022).

Purpose of the Study

The aim of this research is to explore the relationship between job autonomy with job satisfaction of critical care nurses. More particularly, it seeks to find out the impact of autonomy at the workplace on satisfaction.

OBJECTIVES OF THE STUDY

1. To assess the relationship between job autonomy and job satisfaction among critical care nurses.

Operational Definitions Job Autonomy

Refers to the degree of control and decision-making authority that nurses have over their clinical practice and work environment.

Job Satisfaction

A subjective indicator of a nurse's contentment with their professional role, influenced by factors such as autonomy, workload, and workplace support.

Table 1 Scoring Table

Variable	Score Range	Category
	≤ 25	Low
Job Autonomy	26–35	Moderate
	≥ 36	Good
	≤ 24	Low
Job Satisfaction	25–34	Moderate
	≥ 35	Good

LITERATURE REVIEW

Reviews on the effects of autonomy on job satisfaction among critical care nurses have been of a more extensive interest due to the nature of the function performed and the complexity of the environment in which they work. Self-governance that identifies the customs of making decisions in professional activities independently is discussed to be effective in increasing job satisfaction and staff retention among the healthcare workers, especially in the Intensive Care Units (ICU). This literature review compiles prior work done on this topic within the context of Pakistani as well as other countries.(Nazir et al., 2022).

Other studies conducted in the global arena have also confirmed the significance of autonomous practices through identifying if and how self-care and decision-making self- sufficiency contributes to satisfaction and demographic in the critical care nurses' enhanced performance in other healthcare systems (Ji et al., 2021). The study points out that the autonomy actually increases job satisfaction and improves work output in high risk healthcare setting. The study found that autonomy improved nurses 'ability to organize work, decreased burnout of the employees, and increased

motivation. In the given study, critical care nurses are also encouraged to practice professional autonomy which is underpinned by an enabling environment at the workplace – as it leads to increased job satisfaction and retention, as pointed by (Dollinger, n.d.).

Another European study by (Heijkants et al., 2024) concerns sustainable employability in self-managing healthcare teams. So, they discovered self-managing teams enhanced the proposed work related variables, particularly, job satisfaction of long-term care staff which comprise of the critical care nurses. This study also has revealed that autonomy has a positive relation of competence and job satisfaction to the extent that it offers the nurses the chance to be independent decision makers on matters falling within their jurisdiction. In line with this concept entails more autonomous decision making organization, where healthcare teams are allowed to handle critical decisions affecting the patient care without much interference, so resulting in higher rate jobs satisfaction and lower turnover as postulated by (By et al., 2024; Heijkants et al., 2024).

To that effect(By et al., 2024) studied the autonomy variable in the prevention of workplace dehumanization in ICUs. In comparing the ICU situations with standard ward their settings as to autonomy and professional respect more, results to higher job satisfaction and dehumanization feelings of the nurses. This work proposed that the implementation of autonomy increases the efficiency in delivery of duties among the nurses and boosts their commitment towards the patients. Such an atmosphere of respect and independence is particularly important in the case of ICU, where the level of required intervention is much higher, and the stress level can also be much higher. (Lee et al., 2022) posit on the need to grant critical care nurses more independence so as to improve job satisfaction and husband their mental health.

(Jarden et al., 2024) discussed the autonomy in community based health programs to analyze its satisfaction level for nurses and midwives. Such autonomy helped the development of job satisfaction and professional growth according to the study since nurses were given an opportunity to have an increased control of their working process in these programs.

Nurses involved in these autonomous programs expressed more perceived meaningfulness at work and higher job satisfaction, a positive correlate of these programs. Such an international focus strengthening the importance of self-managed work contexts to improve the quality of healthcare workers' experience and mitigate burnout rates specified by (Dollinger, n.d.; Jarden et al., 2024).

Literature in Pakistan regarding autonomy among critical care nurses has revealed a positive relation

between autonomy and job satisfaction, as those critical care nurses who get more autonomy in their practice show high level of job satisfaction and commitment to the clients. However, (Muhammad Saeed et al., 2024) studied the ICU nurses in Balochistan and investigated the connection between the level of Professional autonomy, satisfaction with job. Consequently, the research established a positive correlation between the degree of autonomy of the ICU nurses and both job satisfaction and a lower degree of burnout. This relationship emerged clearly where the nurses' felt that their perception on patient outcomes had been boosted and hence the quality of care was increased. Lack of autonomy that such findings depict runs contrary to enhancing of full autonomy for nurse anesthetists and critical care nurses who might be occasioned vital in decreasing stress and turnover rates in the same field (Muhammad Saeed et al., 2024)

MATERIALS AND METHODS **Study Design**

A cross-sectional descriptive study design is used since it involves description without intervening with the two variables of interest, namely job autonomy and job satisfaction amongst critical care nurses. Cross-sectional research design is suitable for establishing relations within a particular population at a certain period, which corresponds to the interest of this research, which is the ICU nurses.

Study Setting

This study was carried out at the University of Lahore Teaching Hospital which comprises four Intensive Care Units (ICUs) and two High Dependency Units (HDUs). This setting is selected because of the variation of intensive care area that offers the best social context in which to examine factors of independence and satisfaction among nurses working in different ICUs & HDUs. Due to a multicultural workforce, this environment provides an elaborate understanding of the effects of autonomy on job satisfaction in relation to the roles of critical care.

Study Population

The study sample comprises all the registered nurses in the ICU and HDU units of the University of Lahore Teaching Hospital. These nurses engage in high risk patient care and thus makes them suitable to examine the impact of autonomy on job satisfaction.

Sampling Technique

Census sampling was used so that all the nurses on the ICU and HDU can be captured. This is made possible owing to the small population size within the respective hospital and thus affords a bottom-up assessment of the overall nursing employees' job satisfaction to the level of autonomy in those units.



Sample Size

A common formula for calculating sample size for a finite population (when the population size is small) is:

$$n_{\text{adjusted}} = \frac{n}{1 + \frac{n-1}{N}}$$

Where:

- n is the initial sample size calculated without correction (36 in your case).
- N is the population size (40).
- n_{adjusted} is the corrected sample size.

Using a 95% confidence level and a 5% margin of error, let's apply the formula to your population of 40 nurses. According to the formula, the required sample size for your population of 40 nurses, with a 95% confidence level and a 5% margin of error, is approximately **36** nurses.

Since the result is a decimal, you would typically round up to ensure adequate representation, so the sample size is **36.**

Study Duration

The research was take approximately four months following the approval of the synopsis, with time allocated for recruitment, data collection, and analysis. This duration allowed sufficient time to gather and analyze data while accommodating nurses' availability in a high-stakes ICU environment.

Inclusion Criteria

- Registered nurses with at least six months of experience in the ICU or HDU settings.
- Nurses between the ages of 25 and 50, to include a diverse age demographic.
- Nurses were to provide informed consent.

These selection criteria ensure participants have relevant experience in critical care and are likely to encounter situations requiring autonomous decision-making.

Exclusion Criteria

- Nurses with less than six months of experience in ICU or HDU settings.
- Nurses unavailable or on leave during data collection.
- Nurses who were unwilling to participate or unable to provide informed consent.

These exclusion criteria ensure that only nurses with sufficient experience and availability are included.

Research Tools

The primary data collection tool is a structured questionnaire divided into three parts:

Demographic Information: Covers basic information such as age, gender, and ICU/HDU experience.

Job Autonomy Scale (JAS): Assesses perceived autonomy and has been widely validated in nursing

research with a Cronbach's alpha of 0.85.

Job Satisfaction Survey (JSS): Measures satisfaction levels with a focus on autonomy-related aspects, validated in healthcare settings with Cronbach's alpha above 0.80.

Data Collection Procedure

Approval and Permissions: Ethical approval was sought from Research Ethical Committee of the University of Lahore, and permission was obtained from hospital administration.

Participant Recruitment and Consent: Eligible nurses were informed about the study's purpose and provided with a consent form. Questionnaire was distributed in person during shifts, allowing participants approximately 15–20 minutes to complete them. The principal investigator oversaw data collection, ensuring adherence to protocol. Completed questionnaires were securely stored, with data coded to protect participant confidentiality

Data Analysis Plan

Data was analyzed using SPSS version 25 Descriptive Statistics is Used to summarize demographic data and survey responses, including means, frequencies, and percentages.

Ethical Considerations

The rules and regulations set by the ethical committee of the University of Lahore were followed while conducting the research and the rights of the research participants were respected.

- Written informed consent attached was be taken from all the participants.
- All information and data collection was be kept confidential.
- Participants was be remained anonymous throughout the study.
- The subjects was be informed that there are no disadvantages or risk on the procedure of the study.
- They was also be informed that they was be free to withdraw at any time during the process of the study.

RESULTS

The results of the study, focusing on the demographic profile of respondents, descriptive analysis of job autonomy and job satisfaction, and their correlation. Scoring categories are introduced for autonomy and job satisfaction to classify participants into levels of good, moderate, and low.

Demographic Characteristics of Respondents

The demographic data of participants (N=36) are summarized in Table 2.



 Table 2

 Demographic Characteristics of Respondents

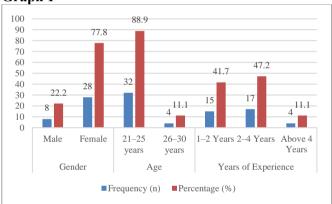
Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	8	22.2
	Female	28	77.8
A ===	21-25 years	32	88.9
Age	26–30 years	4	11.1
	1-2 Years	15	41.7
Years of	2–4 Years	17	47.2
Experience	Above 4 Years	4	11.1

The majority of participants were female (77.8%) and aged between 21–25 years (88.9%).

Most participants had 2–4 years of professional experience (47.2%), followed by those with 1–2 years (41.7%).

The demographic distribution suggests that participants were predominantly younger nurses at the early stages of their careers.

Graph 1



Scoring for Job Autonomy and Job Satisfaction

Based on the mean scores and standard deviation, participants were categorized into three levels: low, moderate, and good for both autonomy and satisfaction.

Table 3 *Joh Autonomy and Joh Satisfaction*

Variable	Score Range	Category
	≤ 25	Low
Job Autonomy	26–35	Moderate
	≥ 36	Good
	≤ 24	Low
Job Satisfaction	25-34	Moderate
	≥ 35	Good

Table 4Scoring Distribution for Job Autonomy and Job Satisfaction

Saisjacion			
Variable	Category	Frequency (n)	Percentage (%)
Job Autonomy	Low	6	16.7
	Moderate	20	55.6
	Good	10	27.8
Job Satisfaction	Low	7	19.4
	Moderate	22	61.1
	Good	7	19.4

Job Autonomy: Most participants (55.6%) reported

moderate levels of autonomy, with 27.8% in the good range. A smaller proportion (16.7%) reported low autonomy.

Job Satisfaction: Similarly, a majority (61.1%) reported moderate job satisfaction, with fewer participants in the low (19.4%) and good (19.4%) categories.

DISCUSSION

Therefore, this chapter presents the study findings, conclusion drawn from the study, hypothesis tested in the research, and related literature. The present study was intended to examine the correlation between job autonomy and job satisfaction of critical care nurses in the University of Lahore Teaching Hospital. The findings contribute useful knowledge to the three research questions, including demographic data, satisfaction, and autonomy.

According to the demographic breakdown, majority of the participants were females, 77.8%, and aged between 21-25 years, 88.9% had 2-4 years of experience on the job 47.2%. These results are consistent with prior research in identifying that the nursing workforce's distribution is mainly females and younger workers in their initial years of their profession. For example, (van Rensburg & Doyer, 2024) noted similar patterns internationally and concluded that these young nurses were attracted by the high turnover intensity and recruitment of new entries into the sector.

This study's revelation of young nurses working in critical care practice areas underscores the considerable professional development and mentoring needs that must be addressed to build their capacity to perform in pressure-filled roles. Laschinger et al. (2016) underscored that young nurses suffer from a great deal of stressful work conditions that may affect job satisfaction.

The findings showed that most participants had moderate level of job autonomy, with 55.6% moderation, while 27.8% indicated high level of job autonomy. This is very important for nurses because they can decide the course of action of their practice within their domain of practice to produce maximum result and satisfaction. (Company-Sancho et al., 2024) Self-Determination Theory: reveal that Autonomy is one of the self intrinsic needs which enhances intrinsic motivation and satisfaction under workplace environment.

However, it is rather alarming that 16.7 % of the participants mentioned low autonomy since it may signalising possible organisational restrictions or excessively bureaucratic environment. (Laari & Duma, 2021) discovered that the nurses with low autonomy where demotivated, unhappy and produced poor productivity. The implication of these findings is for the identification of interventions that might enhance the

role of nurses for example sharing of decision-making responsibilities and role clarification..

The results of the study are consistencies with the advancing trends of researches done in various countries in the world, where interdependence is observed between both autonomy and satisfaction. For example:

(By et al., 2024) observed the same relationship with Chinese nurses, and concluded that autonomy explained 37% of variations in satisfaction indices.

The argument of the authors (Mahmood et al., n.d.) also showed that the structural reform in nurses decreased job dissatisfaction and also enhanced the outcomes of the patients.

However, the study differs with the recent study conducted by (Shaban Hassan & Sayed Bayomi, 2024) where the writers pointed that younger group of nurses exhibited lower satisfaction levels they may be due to cultural or organizational disparities.

LIMITATIONS

Despite its strengths, this study has some limitations:

- A primary liability is a small sample size (N = 36), which can restrict generalization of results to other populations.
- It was only possible to conduct the study among nurses in a particular hospital; the experiences of the nurses in other facilities may be different.

REFERENCES

Byun, E., Kohen, R., Becker, K. J., Kirkness, C. J., Khot, S., & Mitchell, P. H. (2020). Stroke impact symptoms are associated with sleep-related impairment. *Heart and Lung, 49*(2), 117–122. https://doi.org/10.1016/j.hrtlng.2019.10.010

Chiu, P., Cummings, G. G., Thorne, S., & Schick-Makaroff, K. (2021). Policy Advocacy and Nursing Organizations: A Scoping Review. *Policy, Politics, and Nursing Practice, 22*(4), 271–291.

https://doi.org/10.1177/15271544211050611

Company-Sancho, M. C., Rich-Ruiz, M., Guillen Toledano, M., Cairós-Ventura, L.-M., Gil Perez, J. D., de Pascual y Medina, A. M., Peláez Alba, M. P., Barreno Estévez, A. I., Alonso Poncelas, M. E., Rodríguez Orihuela, C., & Brito-Brito, P. R. (2024). Areas for Improvement and Barriers Identified in Measuring the Quality of Nursing Care: Perceptions of Patients and Professionals. *Nursing Reports*, *14*(4), 2896–2909. https://doi.org/10.3390/nursrep14040211

Garratt, S., Dowling, A., & Manias, E. (2024).

Medication administration in aged care facilities: A mixed-methods systematic review. *Journal of Advanced Nursing*.

• The use of self-reported data has a problem of response bias.

CONCLUSION

This study brings about the continued importance of job autonomy in determining job satisfaction among critical care nurses. The positive relationship highlights the importance of organizational policies that should enhance the position of nurses and formulate making appropriate organizational culture. Eliminating all the system level antecedents of autonomy and satisfaction is crucial if the status of nurses, patients, and the quality of the health care to be delivered is to improve.

In the future studies these relationships should be investigated in more extensive and diverse samples to confirm these observations and to generate the complex treatment plans.

Acknowledgement

This research is dedicated to my beloved parents, whose unwavering support, sacrifices, and love have been the foundation of my every success. I also dedicate this work to my dear friend, Sheharyar Ahmed, whose constant motivation, companionship, and belief in me have been invaluable throughout this journey.

To all my friends and Teachers, thank you for being my greatest pillars of strength and encouragement.

https://doi.org/10.1111/jan.16318

Georgakis, S., Dragioti, E., Gouva, M., Papathanakos, G., & Koulouras, V. (2024). The Complex Dynamics of Decision-Making at the End of Life in the Intensive Care Unit: A Systematic Review of Stakeholders' Views and Influential Factors. *Curēus*.

https://doi.org/10.7759/cureus.52912

Gillani, A. H., Islam, F. M. A., Hayat, K., Atif, N., Yang, C., Chang, J., Qu, Z., & Fang, Y. (2018). Knowledge, attitudes and practices regarding diabetes in the general population: A cross-sectional study from Pakistan. *International Journal of Environmental Research and Public Health*, 15(9). https://doi.org/10.3390/ijerph15091906

Graupner, C., Breukink, S. O., Mul, S., Claessens, & D., Slok, A. H. M., & Kimman, M. L. (2021). Patient-reported outcome measures in oncology: a qualitative study of the healthcare professional's perspective. *Supportive Care in Cancer*, 29, 5253–5261. https://doi.org/10.1007/s00520-021-06052-9/Published

Gulzar SID, S., Fraser, J. R., Professor Nursing Sue Randall, A., & Professor Primary Health Care,



- A. (2021). Thesis-Adolescents' Physical Activity Physical Activity Levels among Young Adolescent Students in Urban Karachi, Pakistan Thesis-Adolescents' Physical Activity.
- Gupta, N., Maliqi, B., França, A., Nyonator, F., Pate, M. A., Sanders, D., Belhadj, H., & Daelmans, B. (2011). Human resources for maternal, newborn and child health: from measurement and planning to performance for improved health outcomes. *Human Resources for Health*, 9(1). https://doi.org/10.1186/1478-4491-9-16
- Hassan, S. S., & Bayomi, S. S. (2024). Knowledge and Reported Practice about Type 1 Diabetes Mellitus among Preparatory Schools Students at Aswan City, Upper Egypt. *Deleted Journal*, *15*(3), 1463–1476. https://doi.org/10.21608/ejhc.2024.399171
- Heijkants, C. H., De Wind, A., Van Hooff, M. L. M., Geurts, S. A. E., & Boot, C. R. L. (2024). Sustainable employability of long-term care staff in self-managing teams: A qualitative study. *Journal of Advanced Nursing*. https://doi.org/10.1111/jan.16161
- Hu, L., & Jiang, W. (2024). Assessing perceptions of nursing knowledge, attitudes, and practices in diabetes management within Chinese healthcare settings. *Frontiers in Public Health*, 12. https://doi.org/10.3389/fpubh.2024.1426339
- James, S., Ashley, C., Wasiams, A., Desborough, J., McInnes, S., Calma, K., Mursa, R., Stephen, C., & Halcomb, E. J. (2021). Experiences of Australian primary healthcare nurses in using telehealth during COVID-19: A qualitative study. *BMJ Open*, 11(8). https://doi.org/10.1136/bmjopen-2021-049095
- Janse, C., & Doyer, I. (2024). Investigating the Intersection of Employee Voice and Resilient Healthcare Systems. https://doi.org/10.46254/af05.20240164
- Jarden, R., Jarden, A., Bujalka, H., Weiland, T., Brockenshire, N., Taylor, G., & Gerdtz, M. (2024). Community-based health programme for nurses and midwives: A mixed methods evaluation. *Journal of Advanced Nursing*. https://doi.org/10.1111/jan.16336
- Ji, X., Wang, Y., & Saylor, J. (2021). Sleep and type 1 diabetes mellitus management among children, adolescents, and emerging young adults: A systematic review. *Journal of Pediatric Nursing*, 61, 245–253. https://doi.org/10.1016/j.pedn.2021.06.010
- Karimi-Shahanjarini, A., Shakibazadeh, E., Rashidian, A., Hajimiri, K., Glenton, C., Noyes, J., Lewin, S., Laurant, M., & Colvin, C. J. (2019). Barriers and facilitators to the implementation of doctornurse substitution strategies in primary care: A

- qualitative evidence synthesis. *Cochrane Database of Systematic Reviews*, 4(4). https://doi.org/10.1002/14651858.cd010412.pu
- Koontalay, A., Suksatan, W., Prabsangob, K., & Sadang, J. M. (2021). Healthcare Workers' Burdens During the COVID-19 Pandemic: A Qualitative Systematic Review. *Journal of Multidisciplinary Healthcare*, Volume 14(14), 3015–3025.

https://doi.org/10.2147/jmdh.s330041

- Kwame, A. (2023). Nurse-Patient Interactions in a Ghanaian Hospital Setting: Exploring Patient Rights in Clinical Communications (Doctoral dissertation, University of Saskatchewan). https://harvest.usask.ca/server/api/core/bitstreams/46a878ea-f9db-4d7a-8872-681e3aaa9959/content
- Laari, L., & Duma, S. E. (2021). Facilitators of the health advocacy role practice of the nurse in Ghana: A qualitative study. *Health Science Reports*, *4*(1). https://doi.org/10.1002/hsr2.220
- Ławnik, A., Pańczuk, A., & Kubińska, Z. (2019). Awareness among nursing students about care for children with type 1 diabetes. *Health Problems of Civilization*, 13(4), 248–253. https://doi.org/10.5114/hpc.2019.84190
- Lee, W., Choi, M. H., Park, E., Park, E., Kang, S., Lee, J., Jang, S. G., Han, H. R., Lee, S. il, & Choi, J. E. (2022). Understanding Physicians' and Nurses' Adaption of National-Leading Patient Safety Culture Policy: A Qualitative Study in Tertiary and General Hospitals in Korea. *Journal of Korean Medical Science*, *37*(14). https://doi.org/10.3346/jkms.2022.37.e114
- Mahmood, S. (2015). Underestimation of body weight and its associated factors among trainee healthcare professionals: A cross-sectional study in Pakistan (Doctoral dissertation, University of Sheffield). https://etheses.whiterose.ac.uk/10082/
- Molina-mula, J., & Gallo-estrada, J. (2020). Impact of nurse-patient relationship on quality of care and in decision-making. patient autonomy **International** Journal of Environmental Health, Research and Public17(3). https://doi.org/10.3390/ijerph17030835
- Muhammad Saeed, Madiha Mukhtar, & Muhammad Afzal. (2024a). Professional Autonomy Among Nurses and Its Effect on Quality of Care Among Patients Transferred from Intensive Care Unit to General Unit. *Journal of Health and Rehabilitation Research*, 4(3), 1–5. https://doi.org/10.61919/jhrr.v4i3.1396
- Muhammad Saeed, Madiha Mukhtar, & Muhammad Afzal. (2024b). Professional Autonomy Among



- Nurses and Its Effect on Quality of Care Among Patients Transferred from Intensive Care Unit to General Unit. *Journal of Health and Rehabilitation Research*, 4(3), 1–5. https://doi.org/10.61919/jhrr.v4i3.1396
- Nazir, T., Umer, M., Najam, M., Nawab, S., Maqsoom, A., Shafi, K., Munir, Y., & Nawaz, I. (2022). Impact role stress on turnover intentions of Pakistan's healthcare workers: Mediating and moderating role of organizational cynicism and self-efficacy. *PLOS ONE*, *17*(12), e0279075. https://doi.org/10.1371/journal.pone.0279075
- Noreen, M., Murad, S., Furqan, M., Sultan, A., & Bloodsworth, P. (2015). Knowledge and awareness about breast cancer and its early symptoms among medical and non-medical students of Southern Punjab, Pakistan. *Asian Pacific Journal of Cancer Prevention*, 16(3), 979–984.

- https://doi.org/10.7314/APJCP.2015.16.3.979
- Ohando, E. O., Minja, D., & Muna, W. (2024). Health infrastructure and implications on provision of health care services to nurses and medium level bureaucrats in health facilities in Siaya County and nationally, Kenya. *J Afr Interdiscipl Stud*, 8, 54-74.
 - https://kenyasocialscienceforum.wordpress.co m/wp-content/uploads/2024/04/pdf-ohando-eal-health-infrastructure-and-implications-onprovision-of-health-care-services-in-siayakenya-1.pdf
- Scholarworks, S., & Rivera, S. (n.d.). Understanding
 Patient-Centered Care: Perception of Hispanic
 Understanding Patient-Centered Care:
 Perception of Hispanic Physicians in Teaching
 Hospitals of the United States Physicians in
 Teaching Hospitals of the United States.
 https://scholarworks.waldenu.edu/dissertations